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“Alive. Changing. New”: Impulses of the Jaques-Dalcroze Dance Institute on the Architecture of Ludwig Mies van der Rohe

Jan FROHBURG and Tanja POPPELREUTER

Abstract

In 1913 the Jaques-Dalcroze Institute organized a number of groundbreaking dance performances at *Gartenstadt Hellerau* near Dresden, Germany that had a far-reaching impact on a variety of avant-garde artists at the time. The expressive dance taught at the institute was inspired by the *Lebensreform* movement that had developed out of concerns of the effects of modernization and mechanization. Its proponents sought to address and mitigate adverse effects that the rapidly developing modern world was thought to inflict on society and individuals. The Garden City Hellerau developed from this movement and the Jaques-Dalcroze Institute was part of a holistic program that wished to find ways towards social reform and the emergence of a “New Man”. The 1913 dance performances thus combined eurythmic dance, innovative stage design, electric light, and musical score to a new form of art that enthused an eclectic audience. German architect Ludwig Mies van der Rohe had personal ties to the Jaques-Dalcroze Institute and was familiar with eurythmic dance as well as with theories that described the impact of free and expressive movement on the individual. When the social responsibility of the architect shifted into the focus of his work during the 1920s Mies developed open spaces without walls as confining boundaries. These spaces where developed on the basis of *Lebensreform* philosophy

and in response to contemporary housing estates that reduced spaces to a minimum but – more importantly – they were conceived to enhance and reform the life of the dweller.

Keywords

Gartenstadt Hellerau – Jaques-Dalcroze Institute – Hans Prinzhorn – Ludwig Mies van der Rohe – Modern Architecture

A New Form of Art

In June of 1913 at *Gartenstadt Hellerau* [Garden City Hellerau] a group of dance students of the Jaques-Dalcroze Institute performed Christoph Willibald Gluck's 1762 opera *Orpheus and Eurydice*.[1] In the opening scene Orpheus sat on a raised platform, surrounded by mourners [Fig. 1] <INSERT FIGURE #.1 HERE>. A wide set of steps connected the platform to the floor of the auditorium just a few feet below. Upstage, another stair rose into obscurity. Dark blue curtains framed the scene, at once solemn and austere. Amor appeared, represented by a single shaft of intense light, and the opera unfolded. Accepting Amor's call, Orpheus climbed the stairs towards the mysterious light. The performance of *Orpheus' Descent into Hades* in the previous year had reversed this opening scene. Here, Orpheus climbed down from the highest point into ever-greater darkness, confronted by the Furies. Placed along the steps and platforms, their naked arms and legs, snakelike swaying with the ebbs and flows of the music, created constant waves of motion only to be calmed by Orpheus' song. The dancers' bodies and the atmosphere on stage were transformed by an ever-changing glow of bluish light. Both performances stimulated enthusiastic critiques: "It is a union of music, the plastic senses, and light, the like of which I have never seen," French poet and dramatist Paul Claudel enthusiastically reported, and the

American writer Upton Sinclair recalled, “Men and women stood shouting their delight at the revelation of a new form of art.”[2]

The dance performances at Hellerau marked a juncture in the evolution of modern arts practices that would, after the First World War, inform the diverse cultural scene of the Weimar Republic. They were the realization of an innovative approach to dance performance and stage design and, at the same time, an inspirational moment with a lasting impact on modern architecture. In this chapter we explore the ways in which modern dance afforded an unprecedented freedom in movement and how this inspired architects to rethink the nature of architectural space.[3] We take as our example the work of architect Ludwig Mies van der Rohe not only because of his close connection to Hellerau but because of a distinct similarity in the theoretical frameworks that underpin his and Jaques-Dalcroze’s thinking.[4] Influenced by ideas – some of which we trace back to his encounters with modern dance at Hellerau – Mies envisioned the modern dweller, the subject of architecture, as less and less constrained by traditions and convention than previous generations had been. His architecture of the late 1920s reflected this emerging outlook: As director of the 1927 *Werkbund* exhibition on housing and chief planner of the experimental Weissenhof housing estate in Stuttgart, Mies was in a key position to redefine the idea of the modern dwelling. Further, the open spaces and precious materials of his German Pavilion, designed for the 1929 International Exposition in Barcelona, represented the new national identity after the First World War. And no other residential design was more controversially discussed in the contemporary architectural press than the Tugendhat House, completed in 1930. Its open living spaces of the main floor, fully glazed along one façade and without conventional internal walls, made some critics wonder whether the house was

intimidating or even habitable at all. To the inhabitants, however, the open space provided a unique sense of freedom that they described as uplifting and liberating.

Modern dance provided an important stimulus for introducing this "openness" and "freedom" into modern architecture, and a vital impulse came from the Jaques-Dalcroze Institute and its performances of *Orpheus and Eurydice*. Founded in 1910 within the Garden City Hellerau the Institute focused on the natural movement of the body and must be understood as the leading reform institution for dance in the early twentieth century. Artistic practice at Hellerau merged "the classical Greek model of a choreographed communion of art and life with sophisticated technologies capable of generating a multi-sensory, immersive spectacle of music, moving lights and bodies," architectural historian Lutz Robbers finds, and in this context "architecture functioned as an indeterminate space where the dissolution of the boundaries between stage and audience, work and life, spirit and body could be performed."[5] Dance education at Hellerau aimed to overcome the rupture between emotion and intellect and taught movement that was unencumbered, for example, by the restrictive rules of classical ballet. By re-conceptualizing the unity of the arts – music, drama, architecture and dance – the Jaques-Dalcroze Institute became not only a common point of origin in the development of modern dance and modern architecture. It was also a node in the philosophical debate regarding the reform of the arts in a rapidly modernizing world with the goal to entice the senses and to elevate the human spirit.

Gartenstadt and *Lebensphilosophie*

The ways in which Hellerau and the Jaques-Dalcroze Institute broke new ground for dance as well as architecture becomes apparent when considered within the broader context of art and

culture at the time. Across Europe, the dawn of the twentieth century was characterized by the rampant expansion of capitalism – imperial politics, extensive industrialization, accelerated mobility and the rapid ascent of an affluent middle class – and simultaneously by immediate counter-reactions that sought to preserve tradition and an organic sense of community. *Art Nouveau* or *Jugendstil*, the dominant art movement at the time, had perhaps achieved what it set out to do since the 1890s: to propose an alternative to eclecticism and an architecture that mainly sought inspiration in its own past. Yet with its emphasis on artistic genius and exuberant craft, which bordered on the decadent, *Art Nouveau* had lost its vitality and it no longer heralded cultural rejuvenation. By the first decade of the twentieth century reform movements started to react to a sense of loss and decay that had been sparked by widespread socio-economic changes. They promoted the renewal of a traditional lifestyle that placed value on education and art, and they promoted urban reform, often in peripheral places away from metropolitan centers. Garden City Hellerau on the rural outskirts of Dresden was one of the earliest and most influential manifestations of this movement in Germany prior to the First World War. Established from 1906 onwards by furniture manufacturer Karl Schmidt and patron of the arts Wolf Dohrn, it realized ideas propagated by the *Deutscher Werkbund* [German Association of Craftsmen], a progressive organization devoted to economic renewal in German industry through the promotion of the applied arts.[6] It was the first concrete manifestation in Germany of the English Garden City movement, based on Ebenezer Howard's blueprints for rural, self-contained communities.[7] The movement was a reaction to the atrocious living conditions of working-class laborers in urban centers. Howard's proposal for garden cities juxtaposed these conditions with a utopian vision of distributed settlements that would harmoniously bring together residences, industry and agriculture.

The Garden City movement resonated with aspirations of philanthropic German architects, artists, industrialists and publicists who shared a concern for the improvement of people's living environment. They conceived the Garden City project at Hellerau as a way to foster social equality, liberal and universal education, and a revival of unalienated art and labor.[8] The architects, patron and industrialists who founded Hellerau set out to find a balance between the destructive forces of capitalism and the often unsettling ideals of socialism and communism by providing a settlement where order was restored to lives jarred by modern civilization. In aiming at the organic unity of living and working, of culture and education, the Hellerau project drew on the ideas of a variegated and ambiguous movement known as *Lebensreform* [life reform], which in turn was based on *Lebensphilosophie*, a vitalist branch of philosophy that emerged after 1900.[9] Located within the broad scope of the interlinking sections of *Lebensphilosophie* was that of *Kulturkritik* [cultural criticism], an anti-modern movement that was critical of modernization, industrialization and urbanization.[10] Thought of as "a laboratory for a new humanity," Hellerau became the most comprehensive experiment in housing and urban planning, aesthetics and performing arts, and as such it was a tangible expression of *Lebensphilosophie* and *Kulturkritik*.[11]

Rhythm and Eurhythmics

Kulturkritik arose as a critical response to the mechanized production and the explosive growth of cities during the nineteenth century that had disrupted and changed traditional patterns of labor and leisure as well as art and agriculture. In his 1896 book *Work and Rhythm* German economist Karl Bücher described modern civilization as afflicted by "arrhythmia," and he argued that the recovery of a lost "rhythm" would restore a healthy accord between citizens and

society.[12] "Rhythm" became a leitmotif in German intellectual culture and beyond, understood as something that permeated and united psychological states and all aspects of physical existence: not as a static, compositional quality but rather dynamically, as a pulsating life force.[13] The Hellerau project embraced Bücher's ideas and hoped to calm the growing dissonance between intellectual work and manual labor, thus quieting the unease that agitated German culture. The convergence on the abstract concept of "rhythm" was the reason why reform architecture sought to engage with dance in the first place.

These ideas fell on fertile soil at Hellerau as the ambition of this Garden City was not only to improve living conditions but also to reform the lifestyle of its inhabitants. Cultural activities of all kinds were central to the reform environment at Hellerau.[14] Music and dance were an integral part of its holistic concept. Eager to organize activities for music lovers and musicians and to provide musical education for children, starting as young as age six, the founders of Hellerau invited Swiss impresario Émile Jaques-Dalcroze to establish his dance institute at Hellerau in 1910.[15] Jaques-Dalcroze had developed an innovative (and controversial) method of teaching concepts of rhythm, structure and musical expression through instinctive yet regulated movements of the body by way of "rhythmic gymnastics," as he initially called it. Even at the time the term brought to mind "visions of rows of bloomer-clad girls swinging Indian clubs to the insistent throbbing of a nasal-voiced piano" – a common misconception.[16] Today widely known as Eurhythmics, the Jaques-Dalcroze method was conceived as a special training for musicians who were taught to translate musical composition into movement.[17] Jaques-Dalcroze envisaged "a musical education in which the body itself played the role of intermediary between sound and thought and became the direct instrument of our feelings."[18] By engaging all the senses the dancer gained both a physical awareness of music and a kinesthetic experience.

The Jaques-Dalcroze method of musical education promised to reinstate "rhythm" and to restore harmony to individuals and their community.

The aspirations of Eurhythmics and those of the Garden City movement coalesced in the mutual desire for social and political renewal. Jaques-Dalcroze wanted to imbue dance in all its fleeting nature with the same presence and authority afforded to architecture, while architecture – *Baukunst* – in turn was to take its lesson from the performing arts. Jaques-Dalcroze hoped to create "a moral and aesthetic architecture identical to that of the buildings, to raise rhythm to the level of a social institution, and prepare the way for a new style […] that may become the basis for a new society," and further "to harmonize, thanks to a special education, the village and its people."[19] Schmidt offered to build an Institute to Jaques-Dalcroze's exact specifications, to "replace the missing church."[20] Whereas the dance classes initially had taken place in Dresden and later in the factory buildings at Hellerau, the Institute's *Festspielhaus* finally opened in 1912.[21]

Festspielhaus and Auditorium

The *Festspielhaus* for the Jaques-Dalcroze Institute was at once house and temple, school and theatre, and it united actors and audience.[22] It included several classrooms or rehearsal spaces, changing and shower rooms, halls for small-scale exercises and an auditorium.[23] To the rear, enclosed by an elegant pergola, was an area for open-air gymnastics. Characterized as "an amalgamation of Temple and Palaestra," it realized, in built form, the Greek-inspired re-integration of body and mind through dance.[24] The ideal of spiritual harmony was captured in the yin-yang symbol that was incorporated in the pediment above the entrance portico. The building for the Jaques-Dalcroze Institute was designed by Heinrich Tessenow.[25] Like all of his designs it

was characterized by sobriety, restraint and "a virtual denial of architectural rhetoric."[26] The monumental appearance of the starkly geometric portico with its deep shadows and unusual proportions – small openings contrasted with tall columns and largely blank façades – was offset by a generous forecourt, symmetrically framed by modest houses. These were the lodgings for the female students of the Institute; only male students were allowed to take rooms in nearby houses.

A plain but impressive auditorium was at the heart of the Institute.[27] The space was free of all decorative detail. Its walls and ceiling were clad in fabric, creating a fully abstract space, immaterial even as the enclosing surfaces were all but dissolved in light. Conceived as an unobstructed and adaptable space it could accommodate an audience of close to six hundred, and about two hundred and fifty performers.[28] A pair of centrally located doors connected to adjacent foyers where performers and participants would mingle between acts before re-entering the shared space of the auditorium. In a radical departure from the conventions of theatre design Tessenow and Jaques-Dalcroze omitted the proscenium arch, wings, flies, traps, act curtain and footlights. There were no physical barriers separating house and stage, and by giving an equal presence to actors and audience alike and thus creating a truly shared experience the Hellerau auditorium marked the transition from theatre to performance space.

Rhythmic Spaces

While Jaques-Dalcroze developed dance and movement and Tessenow provided the space for it, Swiss scenographer Adolphe Appia designed the stage that proved a pivotal link between architecture, dance and audience.[29] Appia and Jaques-Dalcroze had met in 1906 and recognized the importance of collaboration between the performance space and dance towards the renewal

of both. Jaques-Dalcroze introduced Appia to his method of experiencing music through movement, while Appia introduced Jaques-Dalcroze to stage design. He provided, quite literally, the background to Jaques-Dalcroze's teaching and delivered a vision that reached far beyond music instruction. Sensitive to the influence of architecture on the theatrical event, it was Appia who had first proposed to define the space of the stage by unornamented, orthogonal surfaces and artful lighting. Initially, Appia had been drawn to Richard Wagner's ideal of the *Gesamtkunstwerk*, the consummate artwork that sought the union of music, drama, dance and even architecture. However, Appia soon became fundamentally critical of the "visual fraud" in Wagner's ungainly scenography, and Appia believed that naturalistic representation constituted a psychological barrier between actor and spectator.[30] Instead, Appia wanted the audience to partake in the emotional process that was being acted out on stage, and he felt that the internal intensity of psychological states had to be "complemented by a strong, plastically expressive staging."[31] Appia was inspired by Jaques-Dalcroze's correlation of musical figures with specific physical gestures, and in the spring of 1909 he produced about twenty designs for what he called "rhythmic spaces" and offered them to Jaques-Dalcroze as settings for his exercises. Appia's drawings showed nuanced spaces created from archetypal elements. Their starkly geometric shapes were meant to offset the plasticity of the body and its fluid movements. Neither illustrating the action on stage nor representing psychological states, Appia granted autonomy to abstract form and atmospheric architecture.

Further, Appia was discontent with a merely static approach to stage lighting, driven only by the need to illuminate the action. He identified with the idea of "creative light" as an artistic means to achieve "a living space for living beings."[32] The lighting in the auditorium, engineered by classically trained painter Alexander von Salzmann, was indeed one of the most innovative

aspects of Hellerau's performance design.[33] Von Salzmann devised an ingenious (and costly) system of indirect steerable lighting that effectively transforming the entire auditorium into a constantly changing body of light.[34] Von Salzmann was interested in light that was "free-floating and agile" as well as "abstract and immediate; he sought "not effect, but atmosphere" and created light that was at once "uniting" and "sounding."[35] Like daylight, the diffuse glow of the auditorium walls softened the contours and enhanced luminous colors, lending harmony to the stage. Projections of moving lights created a sensation of atmospheric density, and sparsely used spotlights supported the flow of action. Much like an actor, light became an integral part of the performance, thus shifting the emphasis from classical formula to engaged artwork. Arguably, the spatial impact of auditorium and stage designs heightened the emotional investment of the audience; it focused and channeled the spectators' attention and made them susceptible for enhanced aesthetic experiences.

A Turning Point in the Artistic Development of the Epoch

The Hellerau performances, the stage the dancers occupied and the space they shared with the audience all challenged the conventions of theatricality. Illusionism and representational aesthetics were left behind while new, performative concepts of art were established. Aware of their achievement, Appia confidently announced, "The *Raumstil* [spatial style] for bodily movements has been found."[36] The auditorium of the *Festspielhaus* was "a space that gathered all within it into an environment shaped almost entirely by light rather than substance" and, as art historian Kathleen James-Chakraborty argues, it played its architectural part in introducing the performing arts to a mass audience.[37] Overwriting the spatial as well as emotional divide between stage and house not only transformed the stage but also the audience. The *Festspielhaus*

at Hellerau became the venue for few but highly acclaimed public performances during the school festivals. Over four thousand guests attended the festival performances of 1913, and media attention was immense, too.[38] This new kind of integrating stage and performance had an immediate impact on architects and their work. Belgian architect Henry van de Velde, for example, took inspiration for the design of the tripartite stage and the use of electric light for his 1914 *Werkbund Theater*.[39] Berlin's *Großes Schauspielhaus*, designed in 1919 by German architect Hans Poelzig in collaboration with director Max Reinhardt, was one of the great achievements of Expressionist architecture and thus contrasted with the aesthetic purity of elementary forms at Hellerau. However, the way the audience surrounded the stage echoed Tessenow's efforts to dissolve the separation between actors and spectators.[40]

Other connections were personal but no less significant. One student of Jaques-Dalcroze was Swiss musician Albert Jeanneret who passed his exam in 1911 and stayed on to teach. He was the older brother of Swiss architect Charles-Edouard Jeanneret, later prominently known as Le Corbusier.[41] The latter attended the performance of *Orpheus and Eurydice* and acknowledged the great performance space at the Institute as "a turning point in the artistic development of the epoch."[42] Later in his career, Le Corbusier introduced what he called *acoustique plastique* as a way to bridge the divide between rationalized construction and poetic yearning – an idea that can also be traced back to Hellerau.[43]

Whether Mies attended the performances in the summer of 1913 is not known. Yet his connection to Hellerau was equally strong and personal. Since 1910 Mies had frequently travelled to Hellerau to visit his future wife Ada Bruhn who studied dance at the Jaques-Dalcroze Institute at the time. Bruhn shared accommodations with two fellow students: Mary Wigman, soon to become a leading pioneer of expressive dance, and Erna Hoffmann, who later married art

historian and psychiatrist Hans Prinzhorn.[44] A close friendship developed among this liberal group, and it is more than likely that Mies was familiar with the performances on the *Festspielhaus* stage, with the concept of Eurhythmics and the ideologies that informed the Hellerau project. Hellerau was for Mies, as for his contemporaries, the site of innovative stage performances, holistic social experiment and profound philosophical inquiry, all aiming for cultural and social renewal through the arts. Still under the impression of Hellerau, Mies began to develop his notion of *Baukunst* [art of building], which he formulated in writing and, most conclusively, in buildings such as the Barcelona Pavilion and the Tugendhat House throughout the 1920s.

Body—Soul—Unity

At the core of Mies's idea of *Baukunst* stood the conviction that technological advancements must be considered as useful tools in the design and building process, yet at the same time Mies remained skeptical of the suggestion that technology was the main driver of progress and the principal solution for social problems. Mies was familiar with the then influential philosophy of Friedrich Nietzsche, and he had read Raoul Francé, a botanist and cultural philosopher, as well as the writings of Catholic architect Rudolf Schwarz and of Romano Guardini, a Catholic priest and intellectual.[45] Reading Guardini and Schwarz aided Mies in clarifying a critical stance towards technology and reinforced his search for architecture's spiritual foundations.[46] After the First World War Mies explored the questions which role technology should play in architecture and, more importantly, what kinds of spaces architecture should provide in support of the emerging modern civilization. It was Hans Prinzhorn, the acquaintance Mies had met in Hellerau, who provided him with a way of thinking about contemporary life and the development of mankind.[47]

Prinzhorn's book *Body—Soul—Unity*, published in 1927, was a reassessment of traditional psychology and aimed to offer clarification about the sources of the "deep change of our entire perception of the human being."[48] Prinzhorn's critique of contemporary psychology echoed Mies's critique of contemporary architecture in that Prinzhorn, too, disapproved of a mechanical world-view according to which the soul could be studied separately from the body and that the natural sciences would be able to quantify and measure the essence of life.[49] Thus it may have aided Mies in his search towards understanding the modern dweller.

Firmly rooted within the realm of *Lebensphilosophie* and mainly based on the Nietzsche's philosophy and Ludwig Klages' *Kulturkritik*, Prinzhorn understood the "Will" as the source of cultural decay.[50] In *Body—Soul—Unity* Prinzhorn explained that a tension between the mind [*Geist*] and life [*Leib-Seele*] was the cause for a broad variety of societal problems of the time. The Will was part of the mind and was described as an invasive, unnatural force that replaced drives and instincts and that, in Klages' as well as in Prinzhorn's thinking, fostered a cultural condition that brought forth decadence and the many defects of the current age.[51] Klages emphasized the destructive character of the mind as it compromised peace, nature and life itself, and saw here the source for the ills brought about by industrialization and technology. Yet Prinzhorn proposed that a New Man was about to emerge. Free from societal conventions and the destructive forces that the Will had imposed on earlier generations, Prinzhorn's thesis "did certainly not apply to the needs and desires of the self-suffering and world-despairing coeval, but instead to still rare human beings who are confident about the world and in unison with the great rhythms of nature and all living entities."[52] Fostering the unity of body and soul – *life* – would free the human being from the destructive subordination to the invasive forces of the Will.

Mies was certainly familiar with Prinzhorn's fundamental critique of the Will, his understanding of the New Man and the concept of *Body— Soul—Unity.* Mies had collaborated with Prinzhorn on several occasions before and had invited Prinzhorn to share his ideas about mental health and creativity in *G – Material for Elemental Form-Creation*, an avant-garde design journal that Mies co-edited.[53] In return, Prinzhorn asked Mies to contribute the volume *Baukunst. Von der Höhle zum Hochhaus* [*Art of building. From the Cave to the High-rise*] tracing the art of building from cave to skyscraper. It was to be part of an ambitious series meant to provide a structured survey of how humans understood the world at the time: *Das Weltbild – Bücher des lebendigen Wissens* [*The Worldview – Books of the Living Knowledge*]. Mies never delivered the promised manuscript but a lecture appears to have been written in relation to the book.[54] In this lecture of March 1926 Mies explained that architecture had to serve the spirit with the means of the time and he defined the "nature of building" as "the spatial execution of spiritual decisions." He further noted, "Nothing is more stupid than to assume that our will is adequate to change the situation under which we live, in this or that direction. Neither a populace nor an individual can attain its aim immediately. Only what lies in the direction of our life's goals can find fulfilment."[55] Mies shared Prinzhorn's suspicion of the Will as the demiurge of change, and both heralded the idea that life should unfold without constraints imposed by the Will. Prinzhorn offered an understanding of man that provided Mies with a clearer understanding of "our life's goals" and the New Man as the subject of modern architecture. Prinzhorn also provided Mies with a theoretical framework and an outlook that envisioned human beings not as corruptible by economics, religion or politics but instead living in accord with the rhythms of nature and all living entities.[56]

The New Dwelling as an Intellectual Problem

Once the economic situation in Germany improved during the mid-1920s a widespread housing crisis had to be addressed, mainly through the construction of large-scale housing projects in urban centers. In parallel, social renewal as the objective of low-income housing was again widely discussed.[57] Architects started to analyze the basic requirements of living and searched for design solution to accommodate subsistence dwelling [*Existenzminimum*]. At times, these led to the conviction that mass housing may be utilized as a means of social engineering and apartments as tools towards changing undesirable behavior.[58] Mies was familiar with this approach but responded critically to it. He rejected the notion that the basic needs of dwellers are quantifiable and that the housing problem should be concerned with satisfying physical needs alone. As the director of the 1927 *Werkbund* exhibition on housing and as the chief planner of the experimental Weissenhof housing estate in Stuttgart Mies asserted, "The problem of the New Dwelling is basically an intellectual problem and the fight for the New Dwelling only an element in the great fight for new ways of life."[59] As the architect of a block of twenty-seven apartments as part of the Weissenhof estate Mies developed moveable walls that allowed inhabitants to organize their apartments freely, rather than determining the floor plan and pursuing normative solutions. Mies's oppositional stance towards the rationalization of floor plans and housing units into types, that had informed his design for the Weissenhof apartments, also led him to search for a focus of his architectural thinking other than technology. As technology was to be a tool but not the sole purpose of architecture, the dweller and the social responsibility of the architect moved into the center of his deliberations.

During the 1920s Mies endeavored to demonstrate how the newly emerging lifestyle might be supported by architectural space in a spiritual way. The development of Mies's concept

of *Baukunst* during that time was aided by Tessenow's abstract classicism and Appia's choreographic spaces, as architectural historian Claire Zimmerman explains, and their influence became evident in key buildings like the Weissenhof apartments and, subsequently, the Barcelona Pavilion and the Tugendhat House. The development of modern architecture before and after the First World War was characterized by close "affiliations between theatrical performance and architectural inhabitation," Zimmerman confirms, and she emphasizes that "Mies, more than any other architect of his day, integrated rhythmic movement into architectural planning."[60] The Barcelona Pavilion, designed to represent the new national identify of the Weimar Republic at the 1929 International Exposition, became the first instance for Mies to realize a new spatial concept that was at once unmistakably modern and rich in sensual experiences. Elevated onto a podium outlined by marble walls, visitors moved freely between the pavilion's various glass screens, its precious onyx wall and the chrome-clad steel columns. Mies transposed choreographed movement through space into an architectural design, and by engaging ritual and performative practices he "also instilled a heightened self-consciousness in visitors to the building," Zimmerman observed.[61] Architectural historian Manfredo Tafuri was the first to link the pavilion to the stage at Hellerau, and he observed that within the space of the pavilion visitors are called upon to become dancers who create new meaning through the interaction of their bodies with light and space.[62]

Spaces for the Elevated Personal Life

Whereas the Barcelona Pavilion was designed as a temporary building only, it was the pavilion's conceptual twin, the Tugendhat House, completed in 1930, that allowed Mies to finally realize his concept of *Baukunst* as a spiritual endeavor in a permanent dwelling [Fig. 2]. <INSERT

FIGURE #.2 HERE> Mies's clients Grete and Fritz Tugendhat sought to depart from conventional notions of living and, according to architectural historian Detlef Mertins, "aspired to a freer, more noble, artistic and philosophical life than the traditional house could support."[63] Walter Riezler, a contemporary architectural critic, acknowledged the design as a demonstration of architecture that was not merely functional but also spiritually and intellectually conceived "for the elevated personal life."[64] However, the open living space in particular prompted other critics at the time to seriously question whether it was a suitable for domestic life.[65] Justus Bier declared the house "unbearable to live in" and thought the expansive living space "dwarfed the individual lives."[66] Roger Ginsburger perceived the house as an intimidating piece of art that would not tolerate any changes by the inhabitants without suffering destruction.[67]

"I never sensed these rooms as displaying pathos, but rather as severe and great – but not in a sense that overwhelms but in one that liberates," responded Grete Tugendhat.[68] A sense of "rhythm" was evoked to highlight the exceptional architectural quality of this house, which in turn related back to the continued appreciation of "rhythm" as a term to capture positive life forces. In defending the Tugendhat House against its critics, German architect Ludwig Hilberseimer observed that its spatial qualities could only be fully appreciated through movement. "No photograph of this house can convey the right impression," Hilberseimer wrote, and he continued, "… one has to move around in this house, its rhythm is like music."[69] It was, again, Grete Tugendhat who found that "the large room – precisely because of its rhythm – has a very particular tranquility, which a closed room could never have."[70] And Fritz Tugendhat emphasized that they "can feel free to an extent never experienced before."[71] Villa Tugendhat was attuned to self-assured and open-minded human beings. It was, as Mertins understood, a place where "a contemplative, if not philosophical life" could unfold.[72]

The Shared Appropriation of Space and Time through Movement

The changes in spatial arrangement in Mies's work during the late 1920s, from the Weissenhof apartment building to the Tugendhat House, exemplified a move away from providing conventionally pre-configured rooms towards adaptable dwellings that were spiritually charged and imbued with a sense of an emergent new lifestyle. Mies had come to comprehended "life" as the integral expression of body and soul, based on his understanding of Prinzhorn's work and by sharing a critical stance towards technological advancements fostered by the rational considerations alone. Spatial openness and intellectual freedom had become the tenets of Mies's architecture, paired with the belief in human beings that were able to assert themselves confidently in a world that was driven not by the potentially destructive "Will" of the individual but by the "great rhythms of nature."[73] Expanding on his engagement with philosophical concepts, Mies rejected aesthetic speculation and formalist doctrines, and he came to define architecture as an essentially intellectual endeavor, as an evolving process. In aphoristic brevity he wrote, "Building art is the spatially apprehended will of the epoch. Alive. Changing. New."[74]

Prinzhorn's as well as Mies's thinking throughout the 1920s was informed by key aspects of *Kulturkritk* that had also been among the founding principles of the Garden City at Hellerau where art was meant to permeate into every aspect of life. The collaboration of Jaques-Dalcroze and Appia at Hellerau before the First World War signaled a turning point in theatre history. Yet its influence reached further still. The immediacy between dancer, space and audience that was achieved at Hellerau – combined with aspirations for social renewal and the creation of a renewed lifestyle that had been at the core of the Garden City concept at Hellerau – fostered a range of innovative artistic expressions. Jaques-Dalcroze's new concept in music education and

Appia's re-imagining of the stage suggested novel approaches that, in time and frequently at the hands of others, would establish the spatial arts upon an entirely different basis. In the few years of its existence the Institute at Hellerau generated impulses that expanded from music education and dance into architecture, art and philosophy. Pioneering performance art and groundbreaking stage design helped to conceptualize the modern relationship between music, time, space and movement.

"Music torn from its isolation, the body coming into its own, plastic feeling brought to life, architectural ambience at the service of the body's proportions and movements,"[75] thus Appia summarized the achievements of dance at Hellerau. Jaques-Dalcroze and Appia conceived of dance as a continuous experience across time and space. The idea of architecture as a spatial sequence, or as a succession of picture-like instances over time, was often credited to cinema where in fact it started with dance at Hellerau.[76] In their performances dancers bridged between time-based art [*Zeitkunst*] – drama and music – and space-bound art [*Raumkunst*] – sculpture and architecture.[77] These dance performances, so tightly intertwined with their stage settings, lead the way towards reconciling the physical and metaphysical dimensions also within architecture. By reaching beyond the idea of architecture's musical proportions and by adopting the concept of "rhythm" architecture was firmly established not only as present in space but as unfolding over time. Modern architecture and dance merged in a shared appropriation of space and time through movement.

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[1] For details see Richard C. Beacham, "Appia, Jaques-Dalcroze, and Hellerau: Part Two: 'Poetry in Motion'," *New Theatre Quarterly* 1, no. 3 (August 1985): 245–61.

[2] Paul Claudel and Upton Sinclair quoted in Beacham, "Appia, Jaques-Dalcroze, and Hellerau: Part Two," 260 and 258.

[3] This text is an amalgamation of two papers presented at the International Conference "Connections in Motion: Dance in Irish and German Literature, Film and Culture," held in

Limerick on 31 October and 1 November 2016: Jan Frohburg (Limerick) "Setting the Scene: Festspielhaus Hellerau," and Tanja Poppelreuter (Manchester) "Spaces for the Elevated Personal Life: Hans Prinzhorn and Mies van der Rohe." The latter was based on: Tanja Poppelreuter, "Spaces for the elevated personal life: Ludwig Mies van der Rohe's concept of the dweller, 1926–1930," *The Journal of Architecture* 21, no. 2 (2016): 244-270, DOI: 10.1080/13602365.2016.1160946.

[4] In the early 1920s, architect Maria Ludwig Michael Mies (1886–1969) changed his name to Ludwig Mies van der Rohe. Under this name he rose to prominence as one of Germany's leading modern architects. He was Vice President of the *Werkbund* and the last director of the Bauhaus before emigrating to Chicago where he became director of the architecture program at IIT.

[5] Lutz Robbers, "1912: Hellerau als 'Spielraum'," in *Participation in Art and Architecture: Spaces of Participation and Occupation*, ed. Martino Stierli and Mechtild Widrich (London: I. B. Tauris, 2016), 198 and 201. Robbers provides a highly detailed analysis that addresses issues closely related to the ones raised in this chapter.

[6] Karl Schmidt (1873–1948) had an interest in the applied arts that spanned, according to Hermann Muthesius, "from sofa cushions to urban planning." Wolf Dohrn (1878–1914), with a background in economics, had been active in liberal politics before co-founding the *Deutscher Werkbund* in 1907. His early death in a skiing accident and the outbreak of the First World War effectively ended the Hellerau project.

[7] Ebenezer Howard (1850–1928) published *To-morrow: A Peaceful Path to Real Reform* in 1898. The book was reprinted as *Garden Cities of To-Morrow* in 1902. Letchworth Garden City was founded in 1903, and Frederick Law Olmsted's Forest Hills Gardens outside New York City and *Gartenstadt Hellerau* followed suit in 1909.

[8] Alongside a major furniture factory and several communal facilities, leading *Werkbund* architects designed Arts and Crafts-inspired houses; some four hundred houses were built in total, and by 1913 the Hellerau community had grown to almost two thousand residents. For a comprehensive account of *Gartenstadt Hellerau* see Nils M. Schinker, *Die Gartenstadt Hellerau 1909–1945: Stadtbaukunst, Kleinwohnungsbau, Sozial- und Bodenreform* (Dresden: Sandstein Kommunikation, 2014) and Marco De Michelis, *Heinrich Tessenow 1876–1950*: *Das architektonische Gesamtwerk* (Stuttgart: Deutsche Verlags-Anstalt, 1991).

[9] For a detailed definition of the complex term *Lebensphilosophie*, consult Nitzan Lebovic, "The Beauty and the Terror of Lebensphilosophie: Ludwig Klages, Walter Benjamin, and Alfred Baeumler," *South Central Review* 23, no. 1 (Spring 2006): 23–39, and Oliver A. I. Botar, "Defining Biocentrism," in *Biocentrism and Modernism*, ed. Oliver A. I. Botar and Isabel Wünsche (Farnham and Burlington: Ashgate, 2011), 15–45.

[10] Poppelreuter, "Spaces for the elevated personal life."

[11] Paul Claudel in an obituary for one of Helleraus's founders, Wolf Dohrn, quoted in Nils M. Schinker, "Hellerau im Spannungsfeld sozialer und künstlerischer Reformansprüche des frühen 20. Jahrhunderts," in: *"Eine ganze Stadt müssen wir erbauen, eine ganze Stadt!" Die Künstlerkolonie Darmstadt auf der Mathildenhöhe,* Arbeitsheft 30 (Wiesbaden: Landesamt für Denkmalpflege, 2017), 135.

[12] Karl Bücher, *Arbeit und Rhythmus* (Leipzig: Hirzel, 1896).

[13] "Rhythm is compulsion," Friedrich Nietzsche boldly stated in *The Gay Science* (1897), and Soviet architect Moisei Ginzburg opened his treatise on *Rhythm in Architecture* (1923) with the broad assertion, "The universe is permeated with rhythm." Moisei Ginzburg, *Rhythm in Architecture*, transl. John Nicolson (London: Artifice, 2016), 9.

[14] Already in 1906 Hellerau architect Theodor Fischer (1862–1938) formulated the ideal of a *Volkshaus*, describing it as "a house not to be inhabited by an individual or a family, but by all; not to study and to become wise, but rather simply happy; not to pray according to this or that belief, but rather to meditate and to live intimately. Therefore not a school, nor a museum, nor a church, nor a concert hall, nor an auditorium! […] something of all of these and also something more." Theodor Fischer, quoted in Marco De Michelis and Vicki Bilenker, "Modernity and Reform, Heinrich Tessenow and the Institut Dalcroze at Hellerau," *Perspecta* 26 (1990): 150.

[15] Émile Jaques-Dalcroze (Jakob Dalkes, 1865–1950) was born in Vienna where he studied music with Robert Fuchs und Anton Bruckner. Before coming to Hellerau, Jaques-Dalcroze taught harmony at the Conservatory in Geneva. He returned there after his Institute in Hellerau defaulted.

[16] Margaret Naumburg, "The Dalcroze Idea: What Eurhythmics is and what it means," *The Outlook*, vol. 106 (17 January 1914), 127.

[17] Émile Jaques-Dalcroze, *The Jaques-Dalcroze Method of Eurhythmics,* [1912] 3rd rev. ed. (London: Constable, 1920).

[18] Émile Jaques-Dalcroze, quoted in De Michelis and Bilenker, "Modernity and Reform," 152.

[19] Jaques-Dalcroze, letter to Wolf Dohrn, 1909, quoted in Ross Anderson, "Adolphe Appia and the Eurhythmic Promise of Hellerau," in *Bauhaus No. 8*, ed. Claudia Perren (Leipzig: Spector, 2016), 95 and Mary Elizabeth Tallon, "Appia's Theatre at Hellerau," *Theatre Journal* 36, no. 4 (December 1984): 496.

[20] William Martin, quoted in Tallon, "Appia's Theatre at Hellerau," 496.

[21] Despite all initial enthusiasm and political support, the building project had to overcome considerable resistance and uncertainties in its conception. Twice the allocated site was pushed further to the periphery of the garden city, and the design had to adapt. Yet within two years over three hundred students joined the Jaques-Dalcroze Institute, despite rather high fees, and in 1911 classes moved to the Institute's new building, then still under construction.

[22] Alternately called *Festspielhaus* (festival hall) and *Bildungsanstalt* (academy), a precise English term for Jaques-Dalcroze's Institute is difficult to ascertain; a contemporary American article called it "College of Rhythm." Naumburg, "The Dalcroze Idea," 127.

[23] After the closure of the dance academy and following an interim use as a primary school and home to a craft cooperative the school building, by then financially troubled, was sold to the provincial government in 1938 and served as a barracks. Used as a hospital and exercise hall by the Soviet Army from 1945 until 1990, it has since been restored and reinstated as a cultural institution.

[24] Quoted in Richard C. Beacham, "Appia, Jaques-Dalcroze, and Hellerau: Part One: 'Music Made Visible'," *New Theatre Quarterly* 1, no. 2 (May 1985): 163.

[25] Heinrich Tessenow (1876–1950) was a provincial architect more at home in the small towns of northern Germany than in the cultural centers of Berlin, Munich or Dresden (although he recognized architecture as a *metropolitan* art form). The buildings at Hellerau were among Tessenow's first major commissions and set the tone for much of his later work.

[26] Gerald Adler, "The German Reform Theatre: Heinrich Tessenow and Eurhythmic Performance Space at Dresden-Hellerau," in *Setting the Scene: Perspectives on Twentieth-Century Theatre Architecture*, ed. Alistair Fair (Abingdon: Routledge, 2015), 45. At Hellerau,

Tessenow also built a number of radically simplified workers' houses. Adler discusses Tessenow's *Festspielhaus* and its context in great detail.

[27] The auditorium was twelve meters high, sixteen meters wide, and thirty-five meters long; a balcony above the entrance hall added another ten meters to the main auditorium space.

[28] The raked banks of simple chairs were demountable and could be stored in a cavity underneath the auditorium floor. Once the seating was installed, that cavity was available as an orchestra pit.

[29] Adolphe Appia (1862–1928) was a recluse, although he corresponded frequently with Jaques-Dalcroze, advising him on scenography and stage design. "Appia's theme was an action in relationship with an architecture," according to his obituary (Appia died young of a mental illness and alcohol). Jacques Copeau quoted in Tallon, "Appia's Theatre at Hellerau," 503.

[30] "Adolphe Appia's reforms were directed first against the 'visual fraud' of the perspective illusion of the scenic stage with its painted decoration." Birgit Wiens, "Modular settings and 'Creative Light': The legacy of Adolphe Appia in the digital age," *International Journal of Performance Arts and Digital Media* 6, no.1 (2010): 28.

[31] Adolphe Appia, quoted in Joseph L. Clarke, "How Not To Be 'Theatrical': Emile Jaques-Dalcroze, Adolphe Appia, Le Corbusier," *CENTER* 18 (2014): 108.

[32] Adolphe Appia, quoted in Wiens, "Modular settings and 'Creative Light'," 35.

[33] Alexander von Salzmann (1874–1934), Russian-born but of German descent, had a background in design; his father was a preeminent architect in Tiflis, Georgia, then part of the Russian empire. Von Salzmann must be credited with introducing lighting design to architecture well before the term *Lichtarchitektur* ("architecture of light") was coined by German engineer Joachim Teichmüller in 1926; architectural lighting design rose to professional prominence in 1950's America. For details, see Dietrich Neumann, "Theatre, Lights, and Architecture," in *The Structure of Light: Richard Kelly and the Illumination of Modern Architecture,* ed. Dietrich Neumann, (New Haven: Yale University Press, 2010), 11–41.

[34] Some three thousand electric light bulbs, some colored, were installed behind translucent canvas screens, tightly stretched and impregnated with cedar oil. The light bulbs were wired to a central control panel, where a single operator could regulate intensity and distribution.

[35] Alexander von Salzmann, "Licht Belichtung und Beleuchtung," in *Das Claudel-Programmbuch* (Hellerau: Hellerauer Verlag, 1913), 89 and 90.

[36] Appia quoted in Anderson, "Adolphe Appia," 99.

[37] Kathleen James-Chakraborty, *German Architecture for a Mass Audience* (London: Routledge, 2000), 75.

[38] Among the visitors in 1913 were Irish playwright George Bernhard Shaw, the actor-director and theorist Harley Granville-Barker, the poets Rainer Maria Rilke and Franz Werfel as well as the painter Oskar Kokoschka, the theatre director and producer Max Reinhardt, the Russian actor and director Konstantin Stanislavski, and Serge Diaghilev, the artistic director of the infamous *Ballets Russes*. Many others made the pilgrimage to Hellerau, among them Ebenezer Howard, novelists Thomas Mann, Stefan Zweig and Upton Sinclair, painter Emil Nolde, art historians Heinrich Wölfflin, Wilhelm Worringer, Julius Meier-Graefe and architects Peter Behrens, Henry van de Velde, Hans Poelzig and Charles-Edouard Jeanneret, who was later prominently known as Le Corbusier. For an enthusiastic appreciation of the Hellerau experiment, see the introductory chapter "New Hellerau" in Harry Francis Mallgrave, *Architecture and Embodiment: The Implications of the New Sciences and Humanities for Design* (Abington and New York: Routledge, 2013), 1–8.

[39] Katherine M. Kuenzli, "Architecture, Individualism, and Nation: Henry van de Velde's 1914 Werkbund Theater Building," *The Art Bulletin* 94, no. 2 (June 2012): 260.

[40] Dorita Hannah, *Event-Space: Theatre Architecture and the Historical Avant-Garde* (New York: Routledge, 2019), 135.

[41] In Hellerau, Albert Jeanneret (1886–1973) lived in the house Tessenow had designed for von Salzmann. His younger brother Charles-Edouard Jeanneret (1887–1965) was working with preeminent artist and architect Peter Behrens in Berlin at the time and came to visit. He was even offered to contribute as Tessenow's employee. In the end he declined and traveled instead. When Albert Jeanneret later returned to Paris and founded his own school of *plastique rhythmique*, Le Corbusier himself took a one-year course. He also published some of Albert Jeanneret's writings on Eurhythmics in his journal *L'Esprit Nouveau*.

[42] Le Corbusier, quoted in Marco De Michelis, "Heinrich Tessenow: die Dresdner Jahre," *Academia.edu*, accessed 8 October 2016, PDF, 63. Appia's "orthogonal principal of the staging of the world" came to have a profound influence on Le Corbusier's work. Jan de Heer, *The*

Architectonic Colour: Polychromy in the Purist Architecture of Le Corbusier (Rotterdam: 010 Publishers, 2009), 112.

[43] For a more detailed discussion of Hellerau's influence on Le Corbusier, see Clarke, "How Not To Be 'Theatrical'."

[44] Mary Wigman (Karoline Sophie Marie Wiegmann, 1886–1973) developed ground breaking choreographies in collaboration with Rudolf von Laban and new approaches to movement training and dance therapy. Through Wigman's student Erina Brady, who introduced modern dance to 1940s Dublin, the influence of Hellerau extended to Ireland. For details of the life of Mary Wigman, see Mary Anne Santos Newhall, *Mary Wigman* (Abington and New York: Routledge, 2009).

[45] For a detailed discussion of Mies's intellectual background consult Fritz Neumeyer, *The Artless Word: Mies van der Rohe on the Building Art*, trans. Mark Jarzombek (London and Cambridge: MIT Press, 1991).

[46] Mies took from Guardini's philosophy the notion that reality should be "artfully ordered," meaning that life should be secure on one hand but free to allow room for the unfolding of the spirit on the other hand so that, according to architectural historian Fritz Neumeyer, it would give "twentieth-century man the ordered, if contrasting, reality of both freedom and retreat, expansiveness and restraint." Neumeyer, *The Artless Word*, 200.

[47] Before studying medicine in Freiburg, Hans Prinzhorn (1886–1933) had studied art history in Tübingen, concluding with a doctoral thesis on the aesthetics of German architect Gottfried Semper that led Prinzhorn to reject formalism and aestheticism. Prinzhorn's field-defining collection of artworks by psychiatric patients expanded the concept of art, and the related publication *Artistry of the Mentally Ill* (1922) was one of the first studies interested in the creative work of the mentally ill as a form of artistic expression. His investigations of the creative process caught the interest of artists and designers. Prinzhorn was invited to give guest lectures at the Bauhaus by Walter Gropius and Hannes Meyer as well as by Mies during their respective tenures as directors at the Bauhaus. The friendship between Prinzhorn and Mies lasted until Prinzhorn's death. For an outline of their friendship and professional collaboration, see Poppelreuter, "Spaces for the elevated personal life."

[48] Hans Prinzhorn, *Leib—Seele—Einheit: Ein Kernproblem der neuen Psychologie* (Potsdam: Müller & Kiepenheuer, and Zürich: Orell Füssli, 1927), 13.

[49] Prinzhorn, *Leib—Seele—Einheit*, 35.

[50] Ludwig Klages, *Der Geist als Widersacher der Seele* (Bonn: Bouvier Verlag Herbert Grundmann, 1981).

[51] Politically, Klages was an anti-Semite and Prinzhorn's philosophy, too, was situated in closer proximity to right-wing than left-wing politics between 1930 and 1932. Thomas Röske, "Hans Prinzhorn: ein 'Sinnender' in der Weimarer Republik," in *Wahn Welt Bild: Die Sammlung Prinzhorn*, ed. Kai Brodersen and Thomas Fuchs (Heidelberg: Universitäts-Gesellschaft, 2002), 34.

[52] Prinzhorn, *Leib—Seele—Einheit*, 72.

[53] Six issues of *G: Materialen zur Elementaren* Gestaltung [G: Materials for Elemental Form-Creation] were published between 1923 and 1926, with Hans Richter, Werner Graeff and Ludwig Mies van der Rohe as its main editors. Detlef Mertins and Michael W. Jennings, eds., *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923–1926* (Los Angeles: Getty Research Institute, 2010).

[54] Neumeyer, *The Artless Word*, 197.

[55] Ludwig Mies van der Rohe, "Lecture" [17 March 1926], in Neumeyer, *The Artless Word*, 252–6.

[56] For the evolution of Mies' philosophical position regarding architecture as a life process before and after 1926 see also Luciana Fornari Colombo, "What is life? Exploring Mies van der Rohe's concept of architecture as a life process," *The Journal of Architecture* 22, no. 8 (2017): 1267–86. For a further interpretation of vitalist ideas in Mies van der Rohe's work see Victoria Watson, "How Henri Lefebvre missed the modernist sensibility of Mies van der Rohe: Vitalism at the intersection of a materialist conception of space and a metaphysical approach to architecture," *The Journal of Architecture* 12, no. 1 (2007): 99–112.

[57] Tanja Poppelreuter, *Das Neue Bauen für den Neuen Men*schen (Hildesheim and Zurich: Olms, 2007).

[58] Poppelreuter, "Spaces for the elevated personal life."

[59] Ludwig Mies van der Rohe, "Vorwort," in *Die Wohnung: Amtlicher Katalog der Werkbundausstellung* (Stuttgart: Tagblatt Buchdruckerei, 1927), 5.

[60] Claire Zimmerman, *Photographic Architecture in the Twentieth Century* (Minneapolis: University of Minnesota Press, 2014), 76, 77.

[61] Zimmerman, *Photographic Architecture*, 78.

[62] Manfredo Tafuri, "The Stage as 'Virtual City': From Fuchs to the Totaltheater," in *Sphere and Labyrinth: Piranesi, architecture and the avant-garde*, trans. Pellegrino d'Aciero and Robert Connolly (London and Cambridge: MIT Press, 1987), 111. See also Lutz Robbers, "Modern Architecture in the Age of Cinema: Mies van der Rohe and the Moving Image" (PhD diss., Princeton University, 2012), 246; and Zimmerman, *Photographic Architecture*, 76.

[63] Detlef Mertins, *Mies* (London and New York: Phaidon, 2014), 180.

[64] Walter Riezler, quoted in Mertins, *Mies*, 175.

[65] Walter Riezler's enthusiastically positive appraisal of the house was countered by Justus Bier with the pointed question, "Can one live in the Tugendhat House?" A public debate in the influential architectural periodical *Die Form* ensued: Walter Riezler, "Das Tugendhat Haus in Brünn," *Die Form* 6, no. 9 (September 1931): 76; Justus Bier, "Kann man im Haus Tugendhat wohnen?" *Die Form* 6, no. 10 (October 1931): 392–3; Roger Ginsburger and Walter Riezler, "Zweckhaftigkeit und geistige Haltung," *Die Form* 6, no. 11 (November 1931): 431–7; and Ludwig Hilberseimer, "Nachwort zur Diskussion um das Haus Tugendhat," *Die Form* 6, no. 11 (November 1931): 438–9. The clients themselves replied with their own assessments of the house in individual responses: Fritz Tugendhat, "Kann man im Haus Tugendhat wohnen?" and Grete Tugendhat [Letter to the editor], *Die Form* 6, no. 11 (November 1931): 437–8. This exchange between critics, supporters and clients is well documented and widely discussed, see for instance: Daniela Hammer-Tugendhat, Ivo Hammer and Wolf Tegethoff, ed. *Ludwig Mies van der Rohe: The Tugendhat House*. Basel: Birkhäuser, 2014; Mertins, *Mies*, 168–81; Dietrich Neumann, "'Can one live in the Tugendhat House?': A Sketch," *Wolkenkuckucksheim*, no. 32 (2012): 87–99.

[66] Bier, "Kann man im Haus Tugendhat wohnen?" 392.

[67] Ginsburger and Riezler, "Zweckhaftigkeit und geistige Haltung," 433.

[68] Tugendhat [Letter to the editor], 438.

[69] Hilberseimer, "Nachwort zur Diskussion um das Haus Tugendhat," 438.

[70] And further, "The rhythm of the large room is so strong that small changes are insignificant." Tugendhat [Letter to the editor], 438.

[71] Tugendhat, "Kann man im Haus Tugendhat wohnen?" 437.

[72] Mertins, *Mies*, 179.

[73] Prinzhorn, *Leib—Seele—Einheit*, 72.

[74] Mies van der Rohe, "Office Building," *G,* no. 1 (July 1923), 3.

[75] Adolphe Appia, quoted in Clarke, "How Not To Be 'Theatrical'," 111.

[76] For the alleged influence of cinema on Mies's architecture, see for instance Robbers, "Modern Architecture in the Age of Cinema;" and Lutz Robbers, "Filmkämpfer Mies," in *Mies van der Rohe im Diskurs*, ed, Kerstin Plüm (Bielefeld: Transcript Verlag, 2014), 63–95.

[77] Albert Einstein (1879–1955) had published his theory of special relativity only in 1905, eventually popularizing the concept of a space-time continuum. For an elaborate discussion of the impact of the space-time concept on art and architecture, see Ulrich Müller, *Raum, Bewegung und Zeit im Werk von Walter Gropius und Ludwig Mies van der Rohe* (Berlin: Akademie Verlag, 2004).